

STATE OF CONNECTICUT

DEPARTMENT OF PUBLIC HEALTH

Raul Pino, M.D., M.P.H.
Commissioner



Dannel P. Malloy
Governor
Nancy Wyman
Lt. Governor

Environmental Health Section

Environmental Engineering Program (EEP) October 13, 2016 Code Advisory Committee (CAC) Meeting

Meeting Sign-in (Members & Visitors), Visitor Introductions, and CAC Member Updates

- CT Association of Directors of Health
- CT Environmental Health Association
- CT Onsite Wastewater Recycling Association
- CT Association of Water Pollution Control Authorities
- Department of Energy and Environmental Protection (DEEP)
- Home Builders and Remodelers Association of CT
- Professional Engineer Associations (CEPP, CSPE, CSCE)
- Soil Scientists
- Visitor Invitations: DPH Private Well Program, CT Water Well Association, DCP Plumbing and Piping Board

Building Code Revisions

- The 2016 CT State Building Code has been approved and became effective on October 1, 2016. The EEP submitted comments on the final draft, and the State Building Inspector confirmed they would change the amended wording in Sections 412.5 Connection Required, and 701.2 Sewer Required in the CT supplement to the 2012 International Plumbing Code (IPC).

Nonpoint Source (NPS) Pollution Matters

- **DEEP Consultant Study:** DEEP shared with DPH a Draft Scope of Work/RFP for a consultant study entitled *Inventory and Assessment of Onsite Wastewater Treatment Systems and their impact on Nitrogen loadings in CT Coastal Areas*. DPH provided comments to DEEP that supported further assessment of on-site sewage system nutrient loading, and the comments noted DPH's continued support for comprehensive decentralized sewage system management in accordance with EPA's voluntary guidelines. DEEP noted that a broad look at decentralized sewage system management in CT is beyond the scope of the project.
- **The 54th Annual Yankee Conference on Environmental Health 2016:** The 2-day September 2016 conference in Mystic, CT had a Subsurface Sewage Track. Day #1 of the track focused on nitrogen loading considerations (LIS: EPA's New Nitrogen Strategy, Embayment Nitrogen Loads in LIS, DEEP's 2nd Generation Nitrogen Strategy, Non-Proprietary and Proprietary Nitrogen Reduction Systems). Day #2 of the track focused on conventional sewage systems matters (design, installation, inspections, and proprietary systems).
- **UConn Center for Land Use Education and Research NEMO Program's MS4 GP 5-Year Plan:** The Nonpoint Education for Municipal Officials (NEMO) is being funded by DEEP for a 5-year program to assist CT communities in complying with the new General Permit for Stormwater from Small Municipal Separate Storm Sewer Systems (a.k.a., MS4 GP). A kick-off webinar was held on October 6, 2016 and it mentioned consultation with local health departments on septic system matters.



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Revisions to the *Technical Standards for Subsurface Sewage Disposal Systems* (Technical Standards)

- Revisions to the Technical Standards may be published on January 1, 2017. DPH advised DEEP that revisions could be made for the 1/1/17 date if a delegation agreement concerning water treatment wastewater was completed by October 1, 2016 in order to give DPH sufficient time to vet the revisions. Although the primary scope of the revisions was intended to address jurisdictional changes affecting on-site disposal of water treatment wastewater, other relatively minor revisions to the Technical Standards would have included:
 - Adding recently approved tight pipes to Table 3
 - Adding recently approved proprietary leaching systems to Section VII
 - Revisions to the criterion in Section VIII H for leaching system spacing reduction considerations
 - Verbiage clarifications and new leaching area cross sections for Appendix A MLSS
 - Updated lists of approved products: effluent filters (Appendix B), filter fabrics (Appendix C), and non-concrete septic tanks (Appendix D)
- A summary of tentative revisions is being prepared by the EEP, and once completed it will be sent electronically to the CAC, and will be posted on the Department's website once a decision is made if revisions are to be made on 1/1/17. Another CAC meeting will be held to vet the proposed revisions if it is decided to move forward with the revisions.

Water Treatment Wastewater

- Historic timeline:
 - Early 1970's, PHC Section 19-13-B20o prohibited water softeners discharges to septic systems
 - PHC Section 19-13-B103 (B103) replaced PHC 19-13-B20 in 1982 following DEP's adoption of regulations (22a-430-1) pursuant to the mandate in CGS Sec. 22a-430(g) to transfer water pollution control authority for <5,000 GPD septic systems from DEEP to DPH. The DEP and B103 regulations excluded wastewater from water softener equipment from the allowable discharges to septic systems.
 - In 1992, DPH participated in legislative task force to address water treatment backwash issues
 - June 24, 1993 F. Schaub memo concerning Disposal of Water Treatment Backwash
 - September 2, 1993 R. Scully letter concerning softener impacts on septic systems
 - March 12, 1998 R. Scully letter to DEP concerning Disposal of Water Treatment Backwash and DEP's draft General Permit
 - In 2000, DEP distributed a "To Whom IT May Concern" letter to local health departments noting their jurisdiction of water treatment wastewater discharges and it noted their intention to adopt a General Permit for such discharges, and provided interim on-site disposal guidance.
 - May 14, 2001 R. Scully memo concerning DEP's Proposed Water Treatment Wastewater General Permit
 - October 30, 2001 DPH memo to DEP on the proposed Water Treatment Wastewater General Permit
 - In 2002, DEP and DPH prepared a draft delegation agreement that would transfer authority for on-site disposal of water treatment wastewater disposal from DEP to DPH.
 - In 2003, DEP prepared a RFP for a study regarding the disposal of water softener and other water treatment wastewaters to the groundwater via a dedicated system.
 - DEP continued work on various drafts of their General Permit in the 2000's and renewed its efforts in 2012 to finalize the permit.
 - March 30, 2009 DPH's Environmental Engineering Program issued Circular Letter #2009-17 authorizing small quantities of point-of-use reverse osmosis discharges to septic systems
 - December 5, 2012 DEEP, DPH, and Local Health Department on Low Flow GP
 - May 6, 2013 DPH's Environmental Engineering Program's comments on Low Flow GP
 - July 18, 2013 DPH's Environmental Engineering Program and Private Well Program comments on Low Flow GP
 - January 30, 2014 DEEP issued the General Permit for the Discharge of Low Flow Water Treatment Wastewater (Low Flow GP). The permit covers point-of-entry systems and expires on January 29, 2024.
 - May 8, 2014, DPH's Private Well Program issued Circular Letter #2014-22 concerning the Low Flow GP
 - July 2014, DPH's Private Well Program established a Low Flow Water Treatment Wastewater Workgroup, and subsequently posted power point presentations from the kick-off meeting on the DPH website along with 24 answers to questions and comments raised by individuals at two July 2014 workgroup meetings.

- Recent developments:
 - December 17, 2014 meeting between the CT Water Well Association (CWWA), DEEP, and DPH's Private Well Program to discuss CWWA's concern with limitations (e.g., costs, doesn't cover radionuclide treatment discharges) of the Low Flow GP. Discussion ensued about possible radiological backwash to septic systems as a solution
 - January 1, 2015, DPH publishes new Technical Standards that include reference in Section X to disposal of water treatment wastewater in accordance with the Low Flow GP, and it cites the ability of DPH to authorize minor quantities of point-of-use non-softener wastewater to septic systems
 - February – March 2015 DPH and DEEP communications concerning the term water softener wastewater, historic department positions on jurisdiction, coverage of the Low Flow GP, and language in the 1/1/15 Technical Standards
 - March 26, 2015 DPH and DEEP Conference Call
 - March 27, 2015 DPH, DEEP, and outside party meeting
 - June 3, 2015 DEEP (Inglese) letter to P. Hurlbut
 - October 2015 DPH Draft Circular Letter concerning Disposal of Backwash from Water Treatment Systems
 - December 3, 2015 DPH's PWP's email to CWWA requesting information about water treatment wastewater
 - February 8, 2016 DPH & DEEP Meeting with P. Hurlbut and R. Mest (Former Water Quality Association (WQA) President)
 - April 4, 2016 P. Hurlbut "3-Stream" water system discharge proposal
 - 2016 DEEP and DPH discussions about a possible delegation agreement to transfer permitting authority from DEEP to DPH for on-site discharges of water treatment system wastewater on properties with sewage disposal systems regulated by DPH and Local Directors of Health (B103/Technical Standards). The draft delegation agreement would allow DPH to authorize discharges to water treatment wastewater dispersal systems (WTWDSs), subsurface sewage disposal systems (SSDSs), or non-discharging holding tanks.
 - October 7, 2016 email from WQA to DPH that included an undated letter from R. Mest to Commissioner Pino

- Actions Items if water treatment wastewater delegation is completed
 - DPH to incorporate siting and sizing criteria for WTWDSs that are included in the Low Flow GP into the Technical Standards with some deviations: no increased separation (12" to 24") above groundwater for source water pathogen removal systems, potential reduction (50' to 25') of the minimum separation distance to watercourses, H-20 rated structures in vehicular travel areas. Seasonal high groundwater level to be changed to maximum groundwater level. The 1.5 safety factor for storage volume will remain, and stone filled excavation void space (e.g., 40%) and conversion calculations for cubic footage volume to gallons to be cited. Local Health Department separating distance reduction provisions included in the Low Flow GP for property line, private well (minimum 25'), and watercourse setbacks on existing developed sites to remain. SSDS setbacks per Technical Standards Table 1 Item Q.
 - DPH to incorporate administrative requirements for WTWDSs into the Technical Standards, and the submission of an as-built per the Low Flow GP will be included. In addition, prior approval for WTWDS installations from the Local Health department shall be required, and advanced notice (e.g., 24 hours) prior to commencement of installation shall be provided to Local Health Department. Further discussion on WTWDS inspections. No licensure requirements for WTWDS installers.
 - Provisions to address potential plugging of WTWDSs with iron and manganese sludge need to be further evaluated, including use of settling structures or filter fabric/geotextile to prevent migration of sediments into the WTWDSs.
 - Language in the Technical Standards relative to authorized discharges to SSDSs to be updated
 - DPH review and approval of authorized discharges to SSDSs from water treatment wastewater devices. Additional info needed on the nature and of volumes of various water treatment wastewaters. Review of possible water treatment discharges to SSDSs should be vetted with the CAC and water treatment industry professionals.
 - Revocation of the Low Flow GP